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Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_45047
Title of the Manuscript:	IN VITRO ANTIOXIDANT POTENCY AND ANTIFUNGAL EFFICIENCY OF FOUR LOCAL TERMINALIA SPECIES AGAINST FUSARIUM STRAINS
Type of the Article	Original Research Article

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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	The article is generally poorly written. The methodology is unclear and non-reproducible. The methodology may nullify the validity of the results as there are several research design and technical errors detected. The methodology must be completely rewritten. The Result and discussion section is unclear and lack convincing or logical scientific justifications for the results obtained. There are too many vocabulary errors. This section should also be majorly modified. I will recommend that the paper be not accepted due to a fundamental research design which may influence a false positive result. However, if the authors are able to respond to all the comments and queries on the paper, I would be willing to review the revised version.	Comment RVW4: The methodology is not detailed. Name the plant species too Answer: This section was about the abstract. Details of methodology will be given in methodology section Comment RVW8: What does earlier researchers mean in this context? Use Answer: It was a mistake, We talk about earlier researches Comment RVW11: Line 50 This information should be stated and explicitly written in the "introduction" section Answer: You can find this information in Introduction section lines 28 to 30. Comment RVW 15: Are you sure this is what the method described here is called? And the use of "inclined tubes" for slants is quite ridiculous. Support with a valid reference Answer: Name of the method used is agar slant double dilution method that was written in the abstract. Here, It was a bad translation of the idea in English. Comment RVW 17: Was this setup for both ethanol and methanol extracts? Then for all the organisms??? Answer: This setup was for each test achieved Comment RVW18: The concentration of the tubes or the content? How did you vary concentration? How was the extract reconstituted for bioassay? Answer: It's about the concentrations of the extracts of these tubes. Explanation The culture medium was distributed in the test tubes due to 20 ml in the tube T100 and 10 ml in the other tubes to the tube T 1.5262. Two (2) mg of the extract was dissolved in the tube T100 to give a concentration of 100 µg/ml. subsequently 10 ml of this tube was taken and transferred to the Tube T50 already containing 10 ml of culture medium to obtain a concentration of 50 µg/ml; then 10 ml of the tube T50 was taken and transferred to the Tube T25 already containing 10 ml of culture medium to obtain a concentration of 25 µg/ml and so on until the tube T1.562 for which half of the content was rejected. This series of dilutions then gives the following consecutive concentrations in µg/ml: 100; 50; 25; 12.5; 6.25; 3.125; 1.562 according to a geometric connection of reason 1/2. This operation was carried out in Marie bath. All these details are not necessary for the manuscript. There was resumed by the name of the method in the text Comment RVW21: With the contents aforementioned?? Was the medium sterilized with the plant extracts in it? Answer: Yes, the medium was sterilized with the plant extract in it. It's possible that the temperature could affect the efficiency of the extracts but the activity observed could be then attributed to the residual activity of the plants extract., which was interesting for a preliminary screening of these plants on <i>Fusarium</i>. Comment RVW22: Is there a specific reason for increasing sterilization time?? Answer: It was an entry error, The sterilization time was 15 minutes Comment RVW23: Inclined? How? Answer: Line 80-81, The tubes were inclined so that the agar formed an oblique slope and a 3 cm base. Comment RVW24: This is confusing! How did you prepare the fungal suspension? Answer: Please Visit this



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A well isolated colony from a six-day culture of the fungal strain was taken with a calibrated loop and then homogenized in 10 ml of sterile distilled water (Stock Solution T0). From this solution , tenth (1/10) dilutions were carried out as follows: 1 ml of the content of the Tube T0 was transferred and homogenized in a tube (T-1) containing 9 ml of distilled water. Subsequently, 1 ml of the tube (T-1) was transferred and homogenized in 9 ml of sterile distilled water in the tube (T-2) so on to the tube (T-4). Then, in order to check the charge of the contents of the tube (T-4), 10 μ l of the contents of this tube were inoculated on new agar for six days. Effective enumeration gives a single colony. the number of colonies obtained relative to the transferred volume (1 ml) in this tube gives 10² cells / ml in the T-4 tube. By applying the dilution factor from one tube to another, thus we obtained 10³ cells / ml for the tube (T-3), 10⁴ cells/ml for the tube (T-2), 10⁵ cells for the tube(T-1) and 10⁶ cells / ml for the tube (T0). In addition, the optical densities recorded by spectrometer for the different tubes (T-1) for each strain were between 0.08 and 0.10 at 625 nm, which corresponded to 0.5 McFarland.

link 1: <http://www.microbiologie-medicale.fr/mycologie/antifongigramme.htm>
Link 2: <http://www.technobio.fr/2014/11/methode-de-denombrement-des-micro-organismes-en-milieu-liquide-methode-dite-du-nombre-le-plus-probable.html>

Liine 91: Was there the use of any standard antifungal for comparison??
Answer: No, we didn't use a standard antifungal in this process because at this level it was a preliminary test on total extracts of plants. For subsequent studies, the chromatographic fractionation of the most active total extract will give fractions whose activity could be compared with that of standard antifungal which is a pure molecule.

Comment RVW25: What was sampled with a loop??
Answer: Line 80: To prepare the inoculum, a well isolated colony from a six-day culture of the fungal strain was taken with a calibrated loop

Comment RVW26: How can a microbial colony be sterile???? This is ridiculous?
Answer: We would like to talk about pure colony (a well isolated colony of the fungal strain). It's an error of translation.

Comment RVW27: What was used for the hyphal homogenization?
Answer: Hyphal homogenization has been done using a vortex

Comment RVW28: Are you claiming that the cells were diluted from 10⁶ cells/ml to 10⁻¹ with one transfer??? Impossible! What was the final fungal cell load used for the assay?
Answer: No, we mean that the stock solution had a charge of 10⁶ cells / ml and corresponded to the 10⁰ dilution, the transfer of 1 ml of this stock solution into another tube containing 9 ml of sterile distilled water gave a solution of dilution 10⁻¹ containing 10⁵ cells / ml. So considering the dilution, we went from 10⁰ to 10⁻¹ but according to the concentration of cells in the tube, we went from 10⁶ cells / ml to 10⁵ cells / ml. Consult the answer for the comment RVW24 about the dilutions.

The final fungal cell load used for the assay was 1000 Cells corresponding to 10 μ l of the suspension 10⁻¹ containing 10⁵ cells/ml (inoculum).

Comment RVW 29: How was the load confirmed? Was there any confirmation with a spectrometer??,
Answer: Yes we used in addition a spectrometer to confirm the load
Please Consult answer for comment RVW24

Comment RVW 37: What does this mean?
Answer: We talk about values of MIC and MFC which are equal. so MIC/MFC = 1<4, so the



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		substance was fungicidal. Consult the link https://www.researchgate.net/publication/283246334_Evaluation_du_pouvoir_antimicrobien_des_huiles_essentielles_de_sept_plantes_medicinales_recoltees_au_Maroc Comment RVW42: Why the comparison to Cymbopogon?? Answer: The antioxidant of C. citratus has been evaluated by the same method. consult reference 17 Comment RVW43: What is the significance of the antioxidant property in relation to its biological activity on Fusarium?? Answer: presence of antioxidant means presence of phenolic compounds such as acids phenolic and flavonoids which are known to have antimicrobial activities .
Minor REVISION comments		
Optional/General comments		

PART 2:

	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	