



SDI Review Form 1.6

Journal Name:	Annual Research & Review in Biology
Manuscript Number:	Ms_ARRB_58252
Title of the Manuscript:	Synthesis of silver nanoparticles from Adansonia digitata leaf extract and its antimicrobial properties
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/journal/10/editorial-policy>)



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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)
<p>Compulsory REVISION comments</p>	<p>Below are the suggestions:</p> <p>Introduction</p> <ul style="list-style-type: none"> - Write a paragraph and use an image with the explanation of the reaction mechanism of the nanoparticle by green synthesis. <p>Methodology</p> <ul style="list-style-type: none"> - Inform the average drying temperature of the leaves, if possible, detailing the relative humidity. - Detail the brand of the rotary evaporator and the conditions for obtaining the dry residue (temperature of the thermostatic bath water and pressure). - Detail the temperature conditions of the thermostatic bath. - Does the dry residue contain methanol? If not, the authors should describe the importance of this step, since in the introduction it was highlighted that one of the advantages of this technique would be to reduce the load of toxic products in the production of nanoparticles. - Was the crude vegetable extract solubilized in any solution before centrifugation? If yes, inform the sample preparation conditions. - It is missing to inform the necessary volume of the supernatant of the plant extract used in the reaction. - In the UV-VIS analysis, it is missing to inform the conditions of sample preparation (was this sample diluted for the UV / VIS analysis?) And it is also missing to inform which solution was used as the blank of the analysis (It was the reagent solution before the formation of the nanoparticle?). - Detail the analysis conditions in the FTIR (resolution and number of scans). - What is the concentration of the bacterial and fungal culture used in the microbiological assay by diffusion? Inform in text. <p>Results and discussion</p> <ul style="list-style-type: none"> - Add at least one reference from the literature that indicates the peak of 418 nm as characteristic of the silver nanoparticle. - I suggest plotting the graph of the UV/VIS spectra in a mathematical data processing software. The scan quality is not good. - The reference used to interpret the FTIR results is not valid, as they are not plants of the same species. I suggest using another paper as a reference (Synthesis, Characterization and Antimicrobial Studies of Stem Bark Mediated Synthesis of Silver Nanoparticles From <i>Adansonia digitata</i> (L.)) to evaluate the characteristic peaks of the plant extract in the FTIR. - The peak in the 3305 cm⁻¹ region refers to the O-H bond and 1635 cm⁻¹ to the amine group (N-H). - Is the scale used in the micrograph correct? The size of the nanoparticles appears to be smaller. I suggest that you review the micrograph and adjust the values, if necessary. - Is spherical morphology characteristic of the silver nanoparticle? Is the spherical morphology obtained characteristic of this type of nanoparticle synthesis? - I suggest that the authors discuss more about SEM analysis, bringing information from the literature. 	



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Minor REVISION comments		
Optional/General comments	Dear authors, initially I would like to congratulate you for the theme and relevance of academic paper. I would like to suggest some modifications to improve some aspects of the scientific paper.	

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>	

Reviewer Details:

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