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Journal Name:	<u>Journal of Advances in Medical and Pharmaceutical Sciences</u>
Manuscript Number:	Ms_JAMPS_34172
Title of the Manuscript:	The Phytochemical and Antimicrobial Potential of The Crude Extracts of Bridelia ferruginea and its extracellular biosynthesized silver Nanoparticles
Type of the 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.

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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 authors describe the antimicrobial properties of the crude extracts of <i>Brideliaferruginea</i>, its use in the biosynthesis of silver nanoparticles and the antimicrobial properties of the obtained silver NPs. The topic of this research is very interesting, however, in my opinion, many improvements are necessary. -In the Introduction, the authors do not consider the big potentiality of nanoparticles, therefore, they should also take into consideration the following literature references: Applied Catalysis A: General, 350, 2008, pp. 46-52; Topics in Catalysis, 52, 2009, pp. 1065-1069; International Journal of Chemical Reactor Engineering, 8, 2010, article A2; Applied Catalysis A: General, 386, 2010, pp. 124-131; ChemCatChem, 2, 2010, pp. 1444-1449; Applied Catalysis A: General, 421-422, 2012, pp. 99-107; Applied Catalysis A: General, 447-448, 2012, pp. 49-59; Applied Catalysis A: General, 468, 2013, pp. 95-101; Applied Catalysis A: General, 496, 2015, pp. 40-50. -In the Introduction, please add new references regarding the synthesis of silver nanoparticles, underling also that some synthetic methodologies are sustainable.	Trying opening but not getting it New references has been added. See line 23 -34.



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	-At page 6, the authors say “for the bio-reduction of the silver nitrate (AgNO₃) into silver (Ag⁺) ions.”. This concept is not clear. The authors repeat in the manuscript the same concept at line 142, at line 296 and at line 318-319. The reduction should be from Ag⁺ to Ag⁰. Can the author clarify this point? -At page 14, when the authors describe the UV-Vis spectra of Figure 1, they say that the highest peak was observed at 400 nm at 24 h, 550 nm at 48 h and 600 nm at 72 h. This peak should be due to the formation of silver nanoparticles. Why is the corresponding wavelength so different in the three cases? -At page 15 the authors report the results of SEM analysis and they speak about particle shape. In my opinion, it is important to know also the particle dimensions, such as the average diameter and the particle size distribution. Can the authors add this information? I think that they can obtain it from SEM analysis, otherwise TEM analysis can be useful. -At page 17, the authors say “It is known from studies that the use of medicinal plant extracts for the synthesis of silver nanoparticles enhances the reduction and stabilization of silver nitrates in an aqueous medium for the formation of silver nanoparticles SNPs”. Can they support this sentence with literature references and/or with personal	See line 143, 152, 312 See line 288 -300 See line e the size and shape TEM is not available so we make use of the available SEM. See line
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	data? -At page 17, at lines 332-336 the authors describe again the UV-Vis spectra. Why? They have already spoken about UV-Vis spectra at lines 278-285. Can the authors join together the two parts? In addition, the sentence “while it centered around wavelengths of 350nm (24 hours), 400nm (48 hours) and 550nm (72 hours) with a very high peak.” is not clear. Can the authors explain better? -The same double parts are present when the authors speak about FT-IR. Can they join together the two parts? -At page 19 the authors say “The aqueous solution of silver nitrate used as control had activity on 3 of the organisms etc.” but from Table 4 it is possible to observe on 2 of the organisms. Can the authors clarify better? -At page 20 the authors say “One of the most remarkable and peculiar properties of silver nanoparticles is their antibacterial activities.” but from Table 4 it is possible to note that the zone of inhibition is greater for the alone crude extract than that for silver nanoparticles. Therefore, which are the advantages of silver nanoparticles? In addition, the inhibition zones for the crude extract and silver nanoparticles are very similar, which is the role of silver nanoparticles? Moreover, when the	See line 336 – 337 It has been restructured See line 313 – 315 See line 359 See line 374
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	authors comment this Table (Table 4), in my opinion, they should add an analyzed comparison with the literature results. -At page 21 the authors say “These SNPs produced from this bark extract showed higher toxicity to the test pathogens when compared to the nanoparticles derived from the other plant extracts used in this study.”, but which are the other plant extracts used in this study? -At page 21, lines 381-392, when the authors report the results of Parveen, Gavhane and Balashanmugam, it is important not only to report the results obtained by other authors but also the reaction conditions in which they have obtained the shown results. Otherwise, it is difficult to make a comparison with literature data. Moreover, as previously said, the literature data reported for comparison is scarce, please add other literature references. -At page 21, line 397, the authors speak about “the minimum inhibitory concentration (MIC)”, how have the authors determined it? Can they explain better this aspect? -At page 22, it is reported “However, the MIC of the synthesized SNPs that prevented the growth of <i>Pseudomonas aeruginosa</i> was at 40% (40µl/ml) while that of the crude extract of the bark of <i>Bridelia ferruginea</i> against <i>P. aeruginosa</i> was at 20%”. This sentence is not clear. Is 40 or 20% the MIC of <i>P. aeruginosa</i>?	See line 379 381 -382 See line See line 187 -197
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	In addition, why in the comment of the results of Table 5 do the authors no comment the data of Bacillus sp? Moreover, it is not clear from the values reported in Table 5 why P. aeruginosa shows a MIC of 40%, whereas the other ones a MIC of 20%. Finally, the last column of Table 5, what does it mean? -Literature reference 12 is not written in the correct way. Which is the year of publication? - The literature reference number 17 must be re-written in the same way of the other literature references. -The manuscript must be revised with the help of a native English speaker because there are many English mistakes. Finally, the total number of literature references is scarce, please add other more recent literature references. Among them, regarding the antimicrobial properties of metal nanoparticles, please consider also the following ones: Applied Surface Science, 280, 2013, pp. 610-618 about the antibacterial and antistatic properties of copper nanoparticles and ChemistrySelect 2, 2017, pp. 2131-2138 regarding the synthesis of silver nanoparticles in the presence of rosemary essential oil as renewable reducing agent.	(methodology) See line 399 – 405 It has been corrected 2005. Done
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		Literatures has been added
<u>Minor</u> REVISION comments	In the whole manuscript there are many typing errors, such as “Brideliaferrugineaandits”; “Brideliaferrugineahas”; “countrieswhich”; “AgNO3”; “Brideliaferrugineawhile4”; “From these work”; “The FTIR spectrum of Brideliaferrugineawere observed”; “There were various functional groups found in this range which includes the carboxyl group”; “Dubeyet al. [32] (2010) and Oboh[33]”; and so on. Please, check carefully the manuscript.	It has been corrected and highlighted in yellow
<u>Optional/General</u> comments	The topic of the paper is interesting but many major improvements are needed.	