



**SDI Review Form 1.6**

Journal Name:	Advances in Research
Manuscript Number:	<b>Ms_AIR_45414</b>
Title of the Manuscript:	<b>POTENTIAL PROBIOTIC PROPERTIES OF LACTIC ACID BACTERIA ISOLATED FROM MALTED AND SPONTANEOUSLY FERMENTED ACHA (<i>Digitaria exilis</i>) FLOUR.</b>
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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
<b>Compulsory</b> REVISION comments	In this manuscript, the authors isolated, characterized and identified LAB with potential probiotic properties from malted and fermented Acha <i>Digitaria exilis</i> . They focused on several characters such as antimicrobial activity, antibiotics susceptibility, NaCl, pH, bile, and gastric transit tolerance, autoaggregation and hydrophobicity besides gelatinase and exopolysaccharide production and DNase activity. However, identification of LAB isolates and safety assessment of LAB are both unconvincing and unsubstantiated.	The work is still in progress. Four (4) out of the selected 14 isolates has been used to ferment acha as starter cultures. The proximate, mineral and antinutritional contents of the developed blends determined and best two formulations were selected. In vivo and in vitro analysis of the nutritional quality and toxicity (safety) assay of the selected two formulations will be carried out using animal experiment. Also, Molecular characterisation using 16S rRNA of the selected two isolates will be done. The authors also intend to determine the genes responsible for those exhibited qualities.
<b>Minor</b> REVISION comments	Language should be improved and there are some punctuation and spelling errors. 1. P2 2.1 4 <sup>0</sup> C to 4°C 2. P5, the two paragraphs from "The antibiotic susceptibility pattern of the LABs to different" to "L12, L13, L15, L17, L19, L113, L115, L116 L117, L118, L22, L211, L213 and L214" are repeated with the following paragraph. 3. P6, L211 "5.5r" to "5.5" 4. P7, "Ofloxacin(OFL)" to "Ofloxacin (OFL)" 5. P9, Fig. 1 Y-axis "Growth @ 560nm" to "OD <sub>560</sub> " 6. P13, "food pathogens; <i>Salmonella</i> sp. <i>Escherichia coli</i> , <i>Bacillus</i> sp.," to "food pathogens: <i>Salmonella</i> sp., <i>Escherichia coli</i> , <i>Bacillus</i> sp.," 7. P13, "so were other pathogens, this result is comparable" to "so were other pathogens, and this result is comparable" 8. P13 "with that of Pundir et al. [14] who stated that resistance to who stated that resistance" to "with that of Pundir et al. [14] who stated that resistance" 9. P13, "However, findings in this current study is in contrast...Agriculture which could be contributing to the dissemination of resistance." This sentence is too long to understand. 10. P16, in "20. Syal P, Vohra A. Probiotic Attributes of a yeast –like fungus," it should be "yeast-like". 11. Some long sentences in Discussion should be rewritten. And some contents in Discussion are the introduction of other researchers' work and discussion should deepen and explain your own research combining with other reports to avoid becoming an introduction part.	Comments 1 -11 has been effected and highlighted in the corrected manuscript.
<b>Optional/General</b> comments	1. P5 2.5 Identification of strains by only morphological, physiological and biochemical tests is not enough to get the accurate results. 2. P5 "The LAB isolates with high antimicrobial activity against all the test pathogens and with good antibiotics susceptibility pattern were further selected for screening of their probiotic potential." But the 14 selected LAB isolates seem not depending on the base in Table 1 and Table 2. For example, why do you choose L19 not choose L11? 3. P9, The safety assessment and P12 Table 7, the three characters gelatinase production, DNAase test, and exopolysaccharide production are not enough to evaluate the safety of LAB and the acute toxicity test in mouse is needed. 4. P12, "Base on the morphological...in Table 8." Base on the provided data of morphological, biochemical and physiological characteristics, the readers cannot get the results of 14 isolates in Table 8. Some physical and chemical properties are very helpful for the identification of the strain but you have to combine the other methods for the accurate result, at least one of the following methods such as PFGE, 16s rDNA, and DNA hybridization analysis. Because even if more than two methods are used, 20%-30% of all identification results of LAB are wrong.	1. The answer is as stated above 2. This is based on the observation as recorded in the 2 tables. It's an over-sight as the two data was very close. 3. The toxicity test will be carried out as stated above 4. Comment 4 too will be addressed as stated above.



**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<u><i>(If yes, Kindly please write down the ethical issues here in details)</i></u>	