



SDI Review Form 1.6

PART 1:

Journal Name:	<u>British Microbiology Research Journal</u>
Manuscript Number:	2013_BMRJ_4860
Title of the Manuscript:	Characterization of Lactic acid bacteria from raw milk samples of Cow, Goat, Sheep, Camel and Buffalo with special elucidation to lactic acid production
Type of the Article	Research Paper

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- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: 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	Introduction : I think that the introduction is not much informative, doesn't provide a factual background, not clearly define the problem and doesn't give a good literature survey in the field (old references). The authors should more detail the interest of the study and the knowledges already available. Material and methods: - milk samples : how many milks were collected? Just one per animal's species? Which milk provide from urban dairy farms and local milk suppliers? - isolation of lactic acid bacteria : MRS medium isn't the optimal medium for the isolation of <i>Lactococcus</i>, <i>Enterococcus</i> or <i>Leuconostoc</i> genera, especially at this temperature (38°C). This fact had certainly influenced the data obtained. Others media as M17 (30°C) for <i>Lactococcus</i>, MSE (mayeux Sandine Elliker) at 30°C for <i>Leuconostoc</i> and SB (Slanetz and bartley) at 42°C for <i>Enterococcus</i> would have been interesting to evaluate all lactic acid bacteria in milks. Moreover, MRS at 38°C selected thermophilic <i>Lactobacillus</i> as <i>delbrueckii</i>. The counts of bacteria on MRS medium was not precised as well as the original number of isolates / milk. Then it is impossible to evaluate their representativity among total bacteria. The division of isolates in five groups isn't clear and not much detailed.	Thank you for you valuable inputs and kind suggestions. As suggested by you, I tried to add some informative background after more literature survey and updated the references. Line 52-63, Line 65-72, Line 76-79. Once again your valuable suggestions were critically considered and inserted in the manuscript. Only few suggestions can't be implemented because it will lead to start the experiment from the beginning. Details of milk samples were added, (Line 93-95), Media details added (Line 100-102), and Samples were divided into groups, so that all the samples get treated separately on the same time. We will target to follow different media and different incubating temperatures and more importantly bacterial counts for our future studies.



SDI Review Form 1.6

	The results indicated data of HPLC and sequencing analysis but these methods weren't described in the material and method section. It is also impossible to evaluate if the protocols used were correct and robust and to reproduce the experiment. On the contrary, the production of lactic acid analysed by pH measures (described in material and methods) wasn't presented in the results section. Results and discussion: Globally, all results were insufficiently commented and discussed in comparison to the literature data. - The results exposed in table 1 weren't commented. From which percentage do the authors consider that the production of acid is strong to select the isolates? - in the same way, the results of tables 2A, 2B and 3 weren't commented in detail. - The figures 1 to 5 are not informative and not necessary. - it is not clear why only the strains G1, B4, CAM3, C1 and S16 were selected for further analysis. - results of sequencing (the protocole was not described) were bad with low percentages of similarity (93 and 95%) : genomic identification is well considered when percentage upper than 97-98% of similarity. Moreover, the species identified were not discussed compared to the species already identified in these sort of milk. Conclusion : The objective of the study is expressed here instead in the introduction.	Method for lactic acid analysis by HPLC and method for genotypic characterization in now added in the manuscript after your suggestions. (Line 115-121) (Line 123-136) Changing the structure of Results and discussion part. I started with screening of isolates which previously was on second place so that I will clearly indicate about the selection of 5 strains from a total of 13. Data in Table 1(a) and 1(b) are commented briefly (Line 146-150) Reasons for selective strain selection are also mentioned along with the discussion part, (Line172-179) while as protocol for sequencing is added in the material & methods. We can't do much about the percentage of similarity as these results were summarized after repeating the sequencing 3-4 times. Conclusion part is now modified after suggestions. Thank you
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	In conclusion, the manuscript should be improved with a clear interest of the study, more details in the material and methods, more comments about results obtained and more discussion in comparison to the literature data. In the conclusion, the authors should precise the interest of the results obtained and the perspectives that they suggest.	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		