



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	2013_BMRJ_6587
Title of the Manuscript:	Lipolytic Activity and Molecular Characterization of Pseudomonas aeruginosa and Lysinibacillus sphaericus from domestic oil rich wastewater
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)
Compulsory REVISION comments	<p>The paper describes the screening for lipolytic bacteria from domestic wastewater. The initial experiments for screening were good, but the second part, are not satisfactory for publication. I have several questions about experimental design which I think will improve the paper.</p> <p>1- The abstract did not describe the paper in general. The conclusion is missing. You don't need to put the name of BLAST, NCBI or HPLC in this section. Please rewrite the abstract section.</p> <p>2- Which lipolytic compounds are present in this wastewater? Since you used soap, I supposed that the majority of oil or fat was lost.</p> <p>3- Please explain the source of bacteria. They were recovering from liquid or solid portion of wastewater?</p> <p>4- Why the authors used different cell concentrations for each media – 0.1mL for wastewater and 10mL for palm oil? The cell number used for each bacteria was the same? If you want to compare isolates and culture media you should at least maintain the same inoculum.</p> <p>5- The growth in different media was performed with or without shaking? Please add on MM section</p> <p>6- Why the authors used 90% palm oil? Is not higher concentration? Lipases can act on oil-water interface and this concentration seems weird for me.</p> <p>7- Why the authors did not measure lipase activity? If you want to search a good lipolytic microorganism,</p>	<ol style="list-style-type: none"> 1. The conclusion is now included highlighted in yellow. The full expression of the abbreviation is being deleted. The abstract is being rewritten. 2. Using the extracting agents, enough fat and oil was extracted from the oil-rich wastewater, which confirmed the presence of fat and oil in the wastewater containing soap. This has already been published in the Journal of Microbiology, Biotechnology and Food Sciences, 1(1) 126-147. 3. The strains were isolated from the wastewater collected along the drainage (10m to exit of drain pipe) that emptied the wastewater into the receiving stream. 4. At the preliminary experiment to standardize the inoculum, the bacteria in wastewater culture were uncountable using the same inoculum; reduction to 0.1mL gave countable colonies. Meanwhile, in any pure analytical work it is the representative sample that matters most and this experiment has complied with that. Whatever the size taken, once it is representative, any other larger sample quantity will give back or give us similar results. 5. With shaking (highlighted in yellow).



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	<p>you should measure the enzyme activity.</p> <p>8- If the authors observed phosphate could increase the weight in wastewater culture, why did not add this compound in palm oil? Seems obvious for me evaluate this question. Or add some concentration of wastewater on palm oil medium.</p> <p>9- Please put in different sections Results and Discussion. The authors added some results in the Discussion section. It was very confuse: (a) please remove lines 164-167 in 3.3 section; 197-208 in 3.5 section; 266-270 in 3.5 section; please remove lines 213-218 – this sentence did not increase the discussion, instead make confuse.</p> <p>10- Why those fatty acids released are important? Please explain.</p> <p>11- Table 2: please mix both columns (only one zone of clearance column is enough).</p> <p>12- Tables 3 and 4: why the authors did not tested the same isolates in both culture media? Please explain. This not makes sense for me.</p> <p>13- Figures 1, 2 and 3: are missing in section Results. Also, the authors should show the Blast results in Table.</p>	<ol style="list-style-type: none"> 6. Using 90% palm oil will produce the same result as that of oil-water interface. Also, using this concentration made the strain to be performing lipolysis naturally and to have gotten the highly lipolytic strains. 7. The lipase study was carried out and it has already been published in Journal of Microbiology Research, 2013, 3(1): 43-52. 8. The experiment was carried out in-situ. I mean the strains in their natural environment. If performed ex-situ/in-vitro, phosphate might be added to boost growth. The design of the experimental was not to increase the activity of the strains for now. This will be done in the subsequent research. 9. The correction has been done. There is no Section 3.5; the Results and Discussion are now together. 10. They are important revealing the biodegradability or biodegradable activity of the strains in various media despite the limiting factors. 11. The two columns are not the same; 0.25-0.34mm represent average lipolysis while 0.35mm and above represent high lipolysis. 12. All were tested in both culture media (i.e wastewater and palm oil respectively). That was the reason for us to have compared and chosen to be the most effective lipolytic strains in various media. The highly lipolytic strains in various media were only stated in those Tables. 13. The figures 1, 2 and 3 are cited and
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		highlighted in yellow in lines 177 and 182 respectively. Please I prefer the BLAST result as figure, to show the authenticity of the result.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		