

Review Form 1.6

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_91643
Title of the Manuscript:	Biodegradation of synthetic dyes by bacteria isolated from textile industry water effluent
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:

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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		
Minor REVISION comments	<p>The Authors presented a study entitled: "Biodegradation of synthetic dyes by bacteria isolated from textile industry water effluent".</p> <p>The work is very interesting and well organized.</p> <p>However, the Authors should follow just some advice before the publication:</p> <p>In the "Abstract", when the Authors reported the expression "decolourization of synthetic dyes", are they referring to the metabolization/degradation of the dyes? Please, in my opinion, it should be better clarified.</p> <p>In the "Introduction", please, check the following sentences because it seems that the expressed concepts are repeated twice: <i>"The textile industry uses a large amount of synthetic dye the in fabric colouring process and the wastewater discharged afterward is contaminated with a load of chemical molecules [1]. This water when reaches the river, the pond, or the lake causes toxicity within the aquatic environment. It blocks the sunlight penetration and increases biological oxygen demand (BOD) of water, the water resource causing death and ecological disturbances in the aquatic life"</i>, and <i>"All textile dyeing industry uses a large amount of different artificial and natural colours during the textile dyeing process, and in the end, the water is released with a large number of harmful chemical molecules [1]. This is merged with other water sources through the drains. The textile industry and dyeing induce changes in the chemical, physical and biological characteristics of the aquatic environment which includes changes in temperature, smell, the taste of water which is dangerous for public health, animals, wildlife, fish, and other natural diversity."</i></p> <p>In the "Results and Discussion" section, paragraph "3.5 BOX PCR Result", please, check the following sentence which seems to be incomplete: <i>"After observing the Gel image and seeing the results of UPGMA: Jaccard's DisSimilarity coefficient; model [15]."</i></p> <p>Moreover, please, check the following sentence for better clarifying the expressed concepts: <i>"It was revealed that Isolate no. "R-1, R-2", "R-14, R-15", "R-16, R-17", and "R-18, R-19" were shown as a similar band. similar band pattern, that confirmed those species were identical to each other."</i></p> <p>Please, check the caption referred to Figure 1 when reporting "Lane 2 -R3"; it should be: "Lane 3-R2".</p> <p>As a suggestion, for figures 3, 4, 5, in my opinion, it should be better to report: "% of degradation".</p> <p>In the "Results and Discussion" section, paragraph "3.6.3 Methylene blue dye decolourization", please check the following expression and revise it in order to avoid the repetitions: <i>"The thiazine dye methylene blue dye"</i>.</p> <p>In the "Results and Discussion" section, paragraph "3.7 Identification of bacterial isolate by 16S rRNA sequencing", please check the following sentence <i>"The complete 16S rRNA sequence of the isolate R-1 (1419 bp), R-6 (1440 bp), R-8 (1435bp), and R-14 (914 bp)"</i> which seems to be incomplete; furthermore, please, check that in this paragraph, it should be reported the reference to figure 7.</p> <p>In the "Conclusions", please check the following sentence: <i>"The current study inclines the degradation of methylene blue, malachite green, Congo red, and methyl red dye using bacteria isolated from dye effluents"</i>; in my opinion it should be better to select another synonym for the verb "inclines".</p> <p>Finally, in the "References" section, please, check the title of the reference 16.</p>	
Optional/General comments	Have the Authors considered the possibility to investigate, maybe in the future, the metabolic pathways of bacterial isolates when the dyes or other pollutants were degraded and utilized as their carbon source?	

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?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

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